REMARKS

Claims 33-47 have been withdrawn from consideration as directed to a non-elected invention. Applicants reserve the right to pursue the subject matter of Claims 33-47 in a continuation application filed during the pendency of the present application.

Claims 23-28 have been rejected under 35 U.S.C. §102 as being anticipated by German patent document DE 196 54 361 A1, assigned to Behr GmbH & Co. ("Behr"). Applicants submit that Behr does not anticipate the claims as amended.

The partial translation of Behr provided by the Examiner states that the reactor has "two groups of fluid separated from one another of flow channels 4a, 4b ... of which a first group functions as reaction channels 4a and the second group functions as heat carrier channels 4b" (emphasis added). The partial translation also states that "the catalyst coating is mounted at corresponding walls of the connecting covering plate such that no fluid connection arises between flow channel breakthroughs of adjacent flow channel plate units" (emphasis added). Thus, the plates of Behr cannot be porous, as it would not be possible to keep the flow channels fluidly separated from each other if the plates were porous. Therefore, Behr does not disclose an apparatus for carrying out a heterogeneous catalytic reaction comprising at least one pair of alternating first and second porous catalyst layers, or a stack comprising a plurality of porous catalyst layers. Accordingly, Claims 23-28 are not anticipated by Behr and

reconsideration of the Examiner's rejection of the claims on this ground is respectfully requested.

Claims 29-30 and Claims 31-32 stand rejected under §103(a) as unpatentable over Behr in view of Farooque, and Behr in view of Lee, respectively. Applicants submit that the rejected claims are not rendered obvious in view of the cited references.

For the reasons stated above, Behr does not disclose the subject matter of Claim 25; the plates of Behr cannot be porous and maintain fluid separation of the channels 4a, 4b. The stated purpose of the plates 2, 3 in Behr would be destroyed if they were porous. Therefore, Behr also does not teach or suggest the subject matter of Claim 25, or of dependent Claims 29-32.

The teaching of neither Farooque nor Lee cures the deficiencies of Behr. Farooque does not teach or suggest porous catalyst layers. Lee teaches adding a stabilization layer to at least one side of a copper foil, which is also not porous. Therefore, the combination of Behr and either Farooque or Lee does not teach or suggest the subject matter of independent Claim 25 and cannot render obvious dependent Claims 29-30 or 31-32. Reconsideration of the Examiner's rejection of the claims on these grounds is respectfully requested.

Applicants would also like to point out that Behr discloses "the walls of the elements facing the reaction channels 4a are at least partially provided with a catalyst coating". Attached is a copy of the drawings from Behr, obtained from the esp@cenet database along with an English abstract and bibliographic

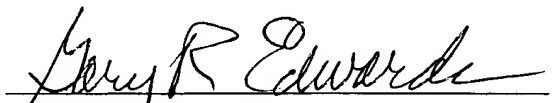
information (also attached). As clearly shown in Figure 1 of Behr, catalyst would only be applied to plates 2. Therefore, the Examiner's interpretation that each plate of Behr as a catalyst layer is not supported.

In response to the Examiner's comment that the anodic oxidation as disclosed in Behr would create a porous structure in the copper, Applicants note that, while a microporous surface layer is disclosed in Behr, this is not the same as a porous catalyst layer, for the reasons of record. Furthermore, there is no teaching or suggestion that the anodic oxidation mentioned in Behr would be applicable to the dendritic copper layer formed on copper foil as disclosed in Lee.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #1748X/49133).

Respectfully submitted,



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Reactor stack with two dedicat d areas

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Equivalents:

Abstract

Chemical reactor built up of plates (2,3) which are stacked alternatively to provide two separate sets of channels (4a,4b). Channels (4a) contain the chemical reagents and channels (4b) carry hot liquid for heat transfer to channels (4a). The wa of channels (4a) are oxidised to form a micro-porous layer into which catalytic material can be deposited.